

May 30, 2003

Dr. Ronald L. Simard  
Nuclear Energy Institute (NEI)  
1776 I Street, NW, Suite 400  
Washington, DC 20006-3708

SUBJECT: RESOLUTION OF EARLY SITE PERMIT TOPIC 16 (ESP-16), EMERGENCY PLANNING

Dear Dr. Simard:

The purpose of this letter is to inform you of our understandings and expectations regarding emergency planning information to be submitted as part of an early site permit (ESP) application. This topic, which is identified as ESP-16 on the list of Nuclear Energy Institute (NEI) generic ESP issues, was discussed at public meetings between July 16, 2002, and January 29, 2003. Subsequently, NEI documented its position on this topic in a letter dated April 7, 2003. The discussion below is our response to the relevant understandings and expectations identified in your letter.

#### NEI Item 1

Pursuant to 10 CFR 52.17(b)(1), the ESP application will identify physical characteristics unique to the proposed site that could pose a significant impediment to the development of emergency plans through a preliminary analysis of the evacuation times utilizing the evacuation time estimate (ETE) methods recommended in NUREG-0654, Revision 1, Supplement 2 (Section II). A description of the analysis methods and results will be provided in the application.

#### Staff Response

The staff agrees with NEI in part. A preliminary analysis of evacuation times is one example of how some significant impediments to the development of emergency plans may be identified. Other factors, such as the availability of adequate shelter facilities, in consideration of local building practices and land use (e.g., outdoor recreation facilities, including camps, beaches, hunting or fishing areas) should also be addressed when identifying significant impediments to the development of emergency plans. Any ETE analysis or other identification of physical impediments, which should include the latest population census numbers and the most recent local conditions, will be reviewed in consultation with the Federal Emergency Management Agency (FEMA).

#### NEI Item 2

Pursuant to 10 CFR 52.17(b)(3), the ESP applicant will provide in the application a description of contacts and arrangements made with local, state, and federal governmental agencies with emergency planning responsibilities. Documentation obtained by the ESP applicant evidencing such contacts will also be discussed in or included with the ESP application.

Staff Response

This is acceptable for applications submitted under 10 CFR 52.17(b)(1) or 10 CFR 52.17(b)(2)(i). For applications submitted under 10 CFR 52.17(b)(2)(ii), the application must contain the certifications identified in 10 CFR 52.17(b)(3) that have been obtained. As stated in SECY-91-041 (Early Site Permit Review Readiness, April 9, 1991), the staff would prefer that letters of agreement be developed with the appropriate state, local, and federal government agencies. Copies of the letters of agreement should be included in the ESP application. In addition, a discussion of the details associated with any ambiguous or incomplete language should also be provided. For an existing reactor site, the description should clearly address the presence of an additional reactor (or reactors) at the site, and any impact that would have on government agency emergency planning responsibilities; including acknowledgment by the agencies of the proposed expanded responsibilities. If the applicant is unable to make arrangements with local, state, and federal government agencies with emergency planning responsibilities, for whatever reason, the applicant should discuss its efforts to make such arrangements along with a description of any compensatory measures. The description and other information will be reviewed in consultation with FEMA.

NEI Item 3

An ESP applicant who elects to propose major features of the emergency plans in accordance with Section 52.17(b)(2)(i) will prepare the information considering the guidance of NUREG-0654, Revision 1, Supplement 2. Appendix E (Section II) of 10 CFR Part 50 may also be utilized as additional guidance.

- If the proposed site is one with a pre-existing nuclear facility and associated existing state and local emergency plans, the ESP application may rely on, and refer to, information contained in these existing plans. Major features proposed in the ESP application that differ significantly from major features discussed in existing plans and relied upon in the ESP application will be discussed in the ESP application.
- If the site does not have a pre-existing nuclear facility and associated emergency plans, the appropriate discussion of the major features of the emergency plans will be provided.

In either case, major features information may consist of state and local agency prepared emergency planning information, applicant prepared information, or combination thereof, depending on the level of state and local governmental agency participation at the ESP stage.

Staff Response

The staff generally agrees with NEI. For a pre-existing nuclear facility, all Supplement 2 major features (i.e., all fourteen planning standards) should be addressed in the ESP application. The detailed, specific evaluation criteria for each of the major features in Supplement 2 should be addressed for both a pre-existing nuclear facility, as well as for applicable major features associated with a site without a pre-existing nuclear facility.

NEI Item 4

If the ESP applicant chooses to propose complete and integrated emergency plans in accordance with Section 52.17(b)(2)(ii), the application will provide the information required by 10 CFR 50.47 and 10 CFR Part 50, Appendix E (using the regulatory guidance found primarily in Revision 1 to NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," and the latest revision of Regulatory Guide 1.101, "Emergency Planning and Preparedness for Nuclear Power Reactors").

Staff response

The staff agrees with NEI.

NEI Item 5

The ESP applicant will identify differences between its emergency planning information and the guidance provided by NUREG-0654, Supplement 2. These differences may include addressing additional planning standards or evaluation criteria for which the ESP applicant has sufficient information, or not addressing some NUREG-0654, Supplement 2, planning standards or evaluation criteria for which the applicant does not have sufficient information at the ESP stage. Any NUREG-0654, Supplement 2, planning standards or evaluation criteria not addressed will be explained.

The NRC will review the emergency planning information provided in the application. An ESP applicant's desire to provide information on less than all "major features" planning standards or associated evaluation criteria identified in NUREG-0654, Supplement 2, will not result in rejection of the application. Similarly, if additional planning standards or evaluation criteria are addressed by the ESP applicant (beyond that identified in NUREG-0654, Supplement 2), the NRC will review and evaluate the additional information in the same manner as the planning standards and evaluation criteria identified in NUREG-0654, Supplement 2.

Staff Response

The staff agrees with NEI's position in part. NEI refers to standards or evaluation criteria that are additional to those in Supplement 2. The staff does not know what this is in reference to, other than possibly NUREG-0654/FEMA-REP-1 planning standards "M" and "N", which are specifically excluded from the Supplement 2 planning standards for the major features option in an ESP application. The fourteen planning standards in Supplement 2 (section V) are those against which the emergency planning information contained in an ESP application (choosing the major features option) will be evaluated. As stated in the Staff Response to NEI Item 3, above, all Supplement 2 major features (i.e., all fourteen planning standards) should be addressed in the ESP application; including the detailed, specific evaluation criteria for each of the major features. If emergency planning information is provided on less than all of the fourteen major features, the application will not be rejected. The review and evaluation will, however, be based on, and specifically limited to, the submitted information only.

The staff does not agree with NEI's statement that NRC will review and evaluate the additional (planning standard and evaluation criteria) information in the same manner as the Supplement 2 planning standards and evaluation criteria; because, as stated above, the staff does not know what this is in reference to.

#### NEI Item 6

The NRC will coordinate reviews and schedules with FEMA in accordance with their current memorandum of understanding.

#### Staff Response

The staff agrees with NEI.

#### NEI Items 7 & 8

Additionally, NUREG-0654, Supplement 2, Section V, identifies the ESP applicable planning standards and evaluation criteria. Evaluation Criterion 4 states: "Each organization shall update its plan and agreements as needed." The following two expectations would establish the "as needed" criterion for an ESP.

#### NEI Item 7

An ESP holder will not be required to periodically update the approved emergency planning information since the plan is not implemented until after an operating license is issued. When referenced in a construction permit (CP) application or combined license (COL) application, the CP or COL applicant will update the information as needed and will specifically identify and address any changes that represent a decrease in the effectiveness of the previously approved information.

#### Staff Response

The staff agrees with NEI in part. (The referenced Supplement 2 Evaluation Criterion is P.4.) Generally, an ESP holder will not be required to periodically update the emergency planning information submitted with an ESP application. This will not preclude any required updating that is associated with, and in support of, an existing reactor site, including updating that may be necessary as a result of any prospective construction activities. Emergency planning information submitted with an ESP application must be up-to-date when the application is submitted, and must reflect use of the proposed site for possible construction of a new reactor (or reactors).

As proposed in SECY-02-0077 (Proposed Rule to Update 10 CFR Part 52, "Early Site Permits, Standard Design Certifications, and Combined Licenses for Nuclear Power Plants," May 8, 2002), an applicant for a construction permit, duplicate design license, or combined license whose application references an early site permit must update and correct the emergency preparedness information provided under 10 CFR 52.17(b) and discuss whether the new information materially changes the bases for compliance with the applicable NRC requirements. This is currently the staff expectation for updating emergency preparedness information associated with an ESP. The staff proposed that such language be added to 10 CFR Part 52 in

SECY-02-0077, and the Commission approved the staff's recommendation in a Staff Requirements Memorandum dated May 6, 2003.

The "decrease in the effectiveness" concept is that which applies to changes to existing emergency plans at licensed reactor sites, in accordance with 10 CFR 50.54(q), and does not apply to updating emergency preparedness information associated with an early site permit.

NEI Item 8

An ESP holder will also not be required to periodically update the supporting organization agreements. When referenced in a CP application or COL application, the CP or COL applicant will update the agreement information, as appropriate.

Staff Response

The staff agrees with NEI. Generally, an ESP holder will not be required to periodically update agreements with supporting organizations. This will not preclude any required updating that is associated with, and in support of, an existing reactor site. The agreement information submitted with the ESP application must be up-to-date when the application is submitted, and must reflect use of the proposed site for possible construction of a new reactor (or reactors). See Staff response to NEI Item 7, above, for a discussion of updating and corrections associated with applications for CPs, duplicate design licenses, and COLs.

Please contact Nanette Gilles, ESP Senior Project Manager, at 301-415-1180 if you have any questions on this matter.

Sincerely,

**/RA/**

James E. Lyons, Director  
New Reactor Licensing Project Office  
Office of Nuclear Reactor Regulation

Project No. 689

cc: See next page

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